

ABSTRACT

Transportation and distribution are very important in the supply chain, where the delivery of goods from the company to get to consumers. In another sense, distribution is where goods move from one location to another. Amanda Brownies in Bandung City faces distribution constraints that result in soaring product inventory distribution costs. In the Amanda Brownies problem, the actual route is still not optimal in delivery, such as the cost of transportation exceeding the cost set by the company by 40%, making the cost large in distribution. This is due to the fact that it is still not optimal in the actual route and causes the vehicle fuel to increase. This problem can be solved using Google OR-Tools software.

By using the Capacitated Vehicle Routing Problem (CVRP) model using Google OR-Tools. The vehicle used is Engkel for distribution to deliver to outlets in Bandung. For optimization using several algorithms contained in Google OR-Tools. Algorithms will be compared for route completion. That way we will get the results of the proposed route and reduce the fuel costs used. In distributing outlets in the city of Bandung, there are 13 outlets scattered. The number of vehicles in the delivery uses 4 vehicles that are ready to deliver to the outlet.

The application of the Capacitated Routing Problem (CVRP) model with Google OR-Tools to reduce costs so that companies do not overpay in distribution and can allocate distribution costs to other parts. Keywords

— CVRP, Optimization, Google OR-Tools